

AMENDMENTS TO THE CLAIMS

Please amend claims 1 through 6 and add claims 7 through 17, as follows:

1 ~~1. (Currently Amended) A process for controlling a transfer voltage in an image forming~~  
2 apparatus, the image forming apparatus comprising an electrification roller electrifying a surface of  
3 a photosensitive drum, a laser scanning unit ("LSU") forming an electrostatic latent image on the  
4 surface of the photosensitive drum, a developing machine making the electrostatic latent image  
5 visible, a transfer roller transferring the image to a recording paper and a fixer fixing the image  
6 transferred to the recording paper, the process comprising the steps of:

7 storing within a memory image data to be printed ~~[[if]]~~ when a print demand is received;  
8 detecting the kind of paper selected by a user;  
9 editing by reducing the number of pixels of the image data at a certain rate ~~[[if]]~~ when the  
10 detected paper is ~~[[a]]~~ thick; and  
11 transmitting the edited image data to the ~~[[LSU]]~~ laser scanning unit and performing the  
12 printing work for the edited image data.

1 2. (Currently Amended) The process according to claim 1, wherein the editing step is  
2 performed using ~~[[Econo]]~~ economy mode in which the pixels of the light scanned are equally split  
3 into an integer number of pixels in order to represent one pixel of the image data, and only a certain  
4 number of pixels among the equally split pixels of the light are scanned.

1 ~~3. (Currently Amended) The process according to claim 1, wherein the editing step is~~  
2 ~~performed using [[Ret]] resolution enhancement technology mode in which the print area is split into~~  
3 ~~a plurality of small areas, and some pixels among the total pixels for each resolution included in the~~  
4 ~~respective small areas are removed.~~

5 4. (Currently Amended) A process for controlling a transfer voltage in an image forming  
6 apparatus, the image forming apparatus comprising a electrification roller electrifying a surface of  
7 a photosensitive drum, a laser scanning unit ("LSU") forming an electrostatic latent image on the  
8 surface of the photosensitive drum, a developing machine making the electrostatic latent image  
9 visible, a transfer roller transferring the image to a recording paper and a fixer fixing the image  
10 transferred to the recording paper, the process comprising the steps of:

11 storing at a memory image data to be printed [[if]] when a print demand is received;  
12 detecting the kind of paper selected by a user;  
transmitting the image data to the ~~LSU~~ laser scanning unit when the detected paper is a  
thick; and  
decreasing the amount of the light emitted from the [[LSU]] laser scanning unit at a  
predetermined rate and performing the printing work.

1 5. (Currently Amended) A process for controlling a transfer voltage in an image forming  
2 apparatus, the image forming apparatus comprising a electrification roller electrifying a surface of

3 ~~a photosensitive drum, a laser scanning unit ("LSU") forming an electrostatic latent image on the~~  
4 ~~surface of the photosensitive drum, a developing machine making the electrostatic latent image~~  
5 ~~visible, a transfer roller transferring the image to a recording paper and a fixer fixing the image~~  
6 ~~transferred to the recording paper, the process comprising the steps of:~~

7 storing image data to be printed at a memory ~~[[if]]~~ when a print demand is received;

8 detecting the kind of paper selected by a user;

9 transmitting the image data to the ~~LSU~~ if laser scanning unit when the detected paper is a  
10 thick; and

11 increasing a developing voltage applied to the developing machine to a predetermined  
12 voltage level and then performing the printing work.

1 6. (Currently Amended) A process according to claim 5, wherein the predetermined voltage  
2 level is equal to or less than -250 ~~[[V]]~~ volts.

1 7. (New) A process in an image forming apparatus, comprising:  
2 storing within a memory image data to be printed on a printable medium by said  
3 image forming apparatus;  
4 making a determination of whether a grade of the printable medium selected by a user  
5 of said image forming apparatus has a first thickness or has a second and greater thickness;  
6 electrifying a surface of a photosensitive drum;  
7 when said determination establishes that the printable medium selected has said

8 second and greater thickness, editing said image data by reducing to a reduced number of pixels, a  
9 quantity of pixels representing said image data, and driving a laser scanning unit to form an  
10 electrostatic latent image on said surface of said photosensitive drum in correspondence with said  
11 reduced number of pixels;

12 driving a developer to convert said electrostatic latent image into a visible image;

13 driving a transfer roller to transfer said visible image to the printable medium  
14 selected; and  
15

fixing said visible image transferred to the printable medium selected.

AK  
1 8. (New) The process according to claim 7, further comprised of:

2 generating said edited data by equally dividing said quantity of pixels into an integer  
3 number of pixels with each said integer number of pixels representing a different pixel of said image  
4 data; and

5 scanning onto said surface of said photosensitive drum only a certain number of  
6 pixels among each said integer number of pixels.

1 9. (New) The process according to claim 7, further comprised of editing said image data  
2 by:

3 dividing said print area into a plurality of smaller areas each exhibiting a  
4 corresponding resolution and each represented by a different group of said quantity of pixels; and  
5 removing some of said pixels from within each said group.

1 ~~10 (New) The process according to claim 9, further comprising of when said~~  
2 determination establishes that the printable medium selected has said first thickness, performing a  
3 normal printing work without editing said image data by not reducing the number of pixels, the  
4 quantity of pixels representing said image data.

5 11. (New) A process in an image forming apparatus, comprising:  
6 storing within a memory image data to be printed on a printable medium by said  
7 image forming apparatus;  
8 making a determination of whether a grade of the printable medium selected by a user  
9 of said image forming apparatus has a first thickness or has a second and greater thickness;  
10 electrifying a surface of a photosensitive drum;  
11 when said determination establishes that the printable medium selected has said  
12 second and greater thickness, transmitting said image data to a laser scanning unit and forming an  
13 electrostatic latent image on said surface of said photosensitive drum after decreasing an amount of  
14 light emitted by said laser scanning unit at a predetermined rate;  
driving a developer to convert said electrostatic latent image into a visible image;  
driving a transfer roller to transfer said visible image to the printable medium  
selected; and  
fixing said visible image transferred to the printable medium selected.

12. (New) The process according to claim 11, further comprising of lowering an engagement force of a toner coated onto the photosensitive surface of said photosensitive drum.

13. (New) A process for controlling transfer voltage in an image forming apparatus, comprising:

storing within a memory image data to be printed on a printable medium by said image forming apparatus;

making a determination of whether a grade of the printable medium selected by a user of said image forming apparatus has a first thickness or has a second and greater thickness;

electrifying a surface of a photosensitive drum;

transmitting said image data to a laser scanning unit and forming an electrostatic latent image on said surface of said photosensitive drum;

driving a developer to convert said electrostatic latent image into a visible image by applying a first developing voltage to a developing roller when said determination indicates that the printable medium selected has said first thickness, and by applying a second developing voltage exhibiting a greater magnitude than said first voltage to said developing roller when said determination indicates that the printable medium selected has said second and greater thickness;

driving a transfer roller to transfer said visible image to the printable medium selected; and

fixing said visible image transferred to the printable medium selected.

1 14. ~~(New) A process according to claim 13, further comprised of said second developing~~  
2 voltage being equal to or less than -250 volts.

1 15. (New) An image forming apparatus, comprising:  
2 a memory storing image data to be printed on a printable medium by said image forming  
3 apparatus;  
4 a photosensitive drum bearing an exterior circumferential surface, positioned along a path  
5 of conveyance of a printable medium selected by a user through said image forming apparatus;  
6 an electrification roller positioned to electrify said surface of said photosensitive drum;  
7 a controller responding to passage of a printable medium along said path by making a  
8 determination of whether a grade of the printable medium selected by a user of said image forming  
9 apparatus has a first thickness or has a second and greater thickness, when said determination  
10 establishes that the printable medium selected has said second and greater thickness, editing said  
11 image data by reducing to a reduced number of pixels, a quantity of pixels representing said image  
12 data, and driving a laser scanning unit to form an electrostatic latent image on said surface of said  
13 photosensitive drum in correspondence with said reduced number of pixels;  
14 a laser scanning unit forming an electrostatic latent image on said surface of said  
15 photosensitive drum in accordance with output data received from said controller;  
16 a developer disposed to convert said electrostatic latent image into a visible image;  
17 a transfer roller disposed along said path opposite from said photosensitive drum, driven to  
18 transfer said visible image to the printable medium selected; and

19 ~~a fixing unit positioned along said path to fix said visible image transferred to the printable~~  
20 medium selected.

1 16. (New) The apparatus according to claim 15, further comprised of said controller  
2 editing said image data by generating said edited data by equally dividing said quantity of pixels into  
3 an integer number of pixels with each said integer number of pixels representing a different pixel  
4 of said image data, and scanning onto said surface of said photosensitive drum only a certain number  
5 of pixels among each said integer number of pixels.

1 17. (New) The apparatus according to claim 15, further comprised of said controller  
2 editing said image data by dividing said print area into a plurality of smaller areas each exhibiting  
3 a corresponding resolution and each represented by a different group of said quantity of pixels, and  
4 removing some of said pixels from within each said group.